# ALLOTRICHOSIPHUM (HOMOPTERA: GREENIDEIDAE), A NEWLY RECORDED GENUS FROM CHINA, AND DESCRIPTION OF A NEW SPECIES <sup>1</sup>

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ABSTRACT: The aphid genus, *Allotrichosiphum*, is newly recorded from China. A new species, *Allotrichosiphum castanopse*, is described. The type is deposited in Zoological Museum, Institute of Zoology, the Chinese Academy of Sciences.

The aphid genus, Allotrichosiphum, was erected by Takahashi in 1962 from the type species, Trichosiphum kashicola (Kurisaki, 1920), collected on Quercus glauca and Q. acuta in Japan. Within the classification of the Aphidoidea, Allotrichosiphum is regarded as a member of the subfamily Greenideinae, within the family Greenideidae. Takahashi (1962) provided a generic key to the genera within Greenideinae. Raychaudhuri et al. (1973) studied aphids from eastern India and described a new species, Allotrichosiphum assamense, on Quercus dealbata in Assam, India. Both species also recognized by Eastop and Hille Ris Lambers (1976), remain distributed in Japan and India. Blackman and Eastop (1994) studied aphids on the world's trees, and included two species, assamense and kashicola, in the genus Allotrichosiphum on Quercus.

Remaudière and Remaudière (1997) confirmed that there were two species in this genus in the world. In this paper, a new species, *Allotrichosiphum castanopse*, on *Castanopsis hicklii* is described from Guangxi Autonomous Region, China. The type is deposited in the Zoological Museum, Institute of Zoology, the Chinese Academy of Sciences.

Aphid terminology in this paper generally follows Takahashi (1962). The unit of measurements in this paper is in millimeters (mm).

### **RESULTS AND DISCUSSION**

## Allotrichosiphum Takahashi, new record in China

Allotrichosiphum Takahashi, 1962, Trans. Shikoku Entomol. Soc. 7(3): 70, by original description; Raychaudhuri, Ghosh, Banerjee and Ghosh, 1973, Knotyu 41(1): 54; Ghosh and Agarwala, 1993, Zoological Survey of India, Part 6: 61.

Type species: Trichosiphum kashicola Kurisaki, 1920, by original description.

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Diagnosis. - Body narrow, not strongly sclerotized, pale, without spinules on lateral areas of venter of abdomen. Dorsal setae not numerous, distinctly capitate or multi-forked, spatulate, and somewhat dilated at tip. Front tubercle distinct. Antennae much shorter than body, 5 segmented, with some long capitate setae; processus terminalis as long as, or a little longer than basal part of segment V. Siphunculi very long, slender, not reticulated, with spinules on apical and basal parts and many long setae. Cauda rounded at apex. Abdominal segments III-VI fused together. Hind tibiae with spinules scattered on distal part, without ridges. First tarsal segment chaetotaxy: 7, 7, 7.

Distribution. - China, Japan, India.

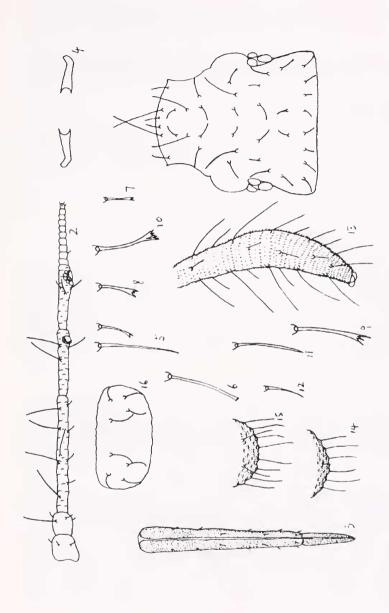
Host plants. - Quercus glauca, Q. acuta, Q. dealbata and Castanopsis hicklii (Fagaceae).

## Allotrichosiphum castanopse, NEW SPECIES

(Figs. 1-16)

Apterous viviparous female.- Body long elliptical. Measurements: body 1.300 in length, 0.500 in width. Antenna 0.700, length of segments 1-V: 0.051, 0.041, 0.232, 0.129, 0.113 + 0.103, respectively. Ultimate rostral segment 0.206 in length, segment IV 0.169 in length, segment V 0.036 in length. Hind femur 0.237, hind tibia 0.371, second hind tarsal segment 0.082. Siphunculus 0.443 in length.

Mounted specimen. - Head, thorax and abdomen slightly brown, apical part of antennal segments III, IV and V, apical part of rostrum, distal part of tibiae and second tarsi brown, others pale. Siphunculi darken brown at media, basal and distal parts slightly pale. Dorsum of body with spinules, venter of abdomen with faint spinules, Head fused with prothorax. Eyes multifaceted, with ocular tubercles. Spiracles small and round, closed; spiracular plates indistinct. Mesosternal furca with two separated arms, length of single arm 0.062, 1.50 times antennal segment II. Dorsal setae fewer and shorter, bi-forked to multi-forked at tip; length of the longest abdominal dorsal setae 0.052, 2.50 times widest diameter of antennal segment III; length of the shortest one 0.010. Ventral setae on abdomen fine and short, capitate or sharp at tip, length of the longest ventral setae 0.031, 1.50 times widest diameter of antennal segment III. Head with 3 pairs of cephalic setae (a pair of longer setae among them), 4 pairs of spinal, 2 pairs of pleural and 1 pair of marginal setae; pronotum with 4 pairs of spinal, 2 pairs of pleural and 3 pairs of marginal setae; mesonotum with 5 pairs of spino-pleural and 4 pairs of marginal setae; metanotum with 1 pair of spinal, 2-3 pleural and 2 pairs of marginal setae; abdominal tergite 1 with 9 long and short setae; tergites II-VI each with 7, 17, 13, 13 and 11 spino-pleural setae, 2, 3, 3, 4 and 2 pairs of marginal setae, respectively; tergites VII and VIII each with 2 setae. Length of cephalic setae 0.072, length of marginal setae on abdominal tergite 1 0.031, length of dorsal setae on tergite VII 0.057, which of dorsal setae on tergite VIII 0.067, 3.50 times, 1.50 times, 2.75 times and 3.25 times widest diameter of antennal segment III, respectively. Media front slightly developed. Antennae 5 segmented, slender, 0.54 times body length; length in proportion of segments 1-V: 23, 18, 100, 56, 49 + 58, respectively; processus terminalis 1.18 times base of the segment. Antennal setae slightly long, thick, stout or slightly capitate at tip, antennal segments I-V each with 5, 5, 9, 3, 1 + 4 setae, respectively; length of setae on antennal segment III 0.067, 3.25 times widest diameter of the segment. Primary rhinaria round, ciliated. Antennal segments III-V imbricated. Rostrum reaching abdominal segment II, ultimate rostral segment long dagger-shaped, 8.00 times its basal width, 2.50 times second hind tarsal segment; segments IV and V distinctly segmented, length of segment IV 4.71 times length of segment V; ultimate rostral segment with 8 pairs of fine and short setae, 6 pairs of accessory setae among them. Legs normal, femora and second tarsi with imbrication. Hind femur about as long as antennal segment III. Hind tibia 0.29 times body length. Length of setae on hind tibia 0.031, 1.20 times middle width of the segment. First tarsal segment chaetotaxy: 7, 7, 7. Siphunculi banana-shaped, curved outwards, gradually more distinctly spinulose apically,



Figs. 1-16 Allotrichosiphum castanopse, sp. nov. Apterous viviparous female: 1, dorsal view of head and prothorax; 2, antenna; 3, ultimate rostral segment; 4, mesosternal furca; 5, cephalic setae; 6, setae on antennal segment III; 7, dorsal setae on pronotum; 8, setae on abdominal tergite I; 9, marginal setae on tergite III; 10, setae on tergite VII; 11, setae on tergite VIII; 12, ventral setae of abdomen; 13, siphunculus; 14, cauda; 15, anal plate; 16, genital plate.

about 0.34 times body length, 5.70 times its widest diameter; with 32 long setae; length of setae 0.124, 1.60 times its widest diameter. Cauda transversely semi-oval, with 7 setae. Anal plate circular at apex, with 10 setae. Genital plate transversely square shaped, with 8 sickle-shaped setae.

Holotype. – Apterous viviparous female, No. Y6527-1-1-3, April 25, 1981, Guangxi Autonomous Region (Bobei County, N22.2°, E109.9°, Alt. 200m), collected by He Yandong, on *Castanopsis hicklii*; paratypes 3 alatoid nymphs, No. Y6527, other data same as holotype.

Etymology. – The new species is named for *Castanopsis*, the host on which it was collected.

**Diagnosis**. - The new species is allied to *Allotrichosiphum assamense* (Raychaudhuri et al.) and *A. kashicola* (Kurisaki), but differs from them as shown in the following key (Apterous viviparous female).

**Remark.** – The information on *Allotrichosiphum assamense* and *A. kashicola* come from their original descriptions (apterous viviparous females unknown; apterous forms are fundatrices).

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endeavor. Otherwise, those who rely on species geographic information are left with potentially important observations that remain insupportable anecdotes or hearsay, and the biological discipline that tolerates such reporting is open to the valid disclaim of others. This issue would be resolved to a large extent if editors of the many scientific journals that publish species lists, faunal and floristic accounts, or geographic records in any form or context insist that supporting data always be provided by authors.

Editor's P.S. to foregoing essay. Although this essay was received as an unsolicited paper, as editor of Entomological News, and with the permission of the above author, 1 append the following statement.

Entomological News aims to be, primarily, a taxonomic journal for short papers on entomology. As stated in each issue, "manuscripts on taxonomy, systematics, morphology, ecology, behavior, and similar aspects of insect life and related terrestrial arthropods are appropriate for submission".

With this as my guide, over the years I have been reluctant to accept papers that are little more than simple checklists, and have repeatedly so advised potential authors. To be considered for publication in *Entomological News*, papers need to provide specific data including date and specific geographic site of collection (the simple naming of a county or other political entity is not sufficient), and the name of the museum or other institution where the specimen(s) is (are) deposited. Papers that do not provide these data are of little value in a scientific journal, for without these data it would be very tedious to nearly impossible to locate reported new records, records could not be verified, and it would be more difficult to re-collect specimens from the same locality for future research. Thus, papers lacking these data usually are not accepted unless there are some compelling reasons to give them favorable consideration. This will continue to be the editorial policy of this journal.